

SPECIFICATION AMENDMENTS:

Please replace paragraph [001] with the following amended paragraph:

The invention relates to a device for realizing an online element analysis as defined in the preamble to Claim 1.

Please delete paragraph [009].

Please replace paragraph [013] with the following amended paragraph:

~~According to claim 2, the~~ The exciting X-radiation ~~[[is]]~~ may also be guided via an X-ray conductor, which further facilitates the adjustment of the device and increases the tolerance to changes in the conditions.

Please replace paragraph [014] with the following amended paragraph:

~~According to claim 5~~ In a preferred embodiment, the X-ray conductors used herein consist of the aforementioned glass capillaries, which are known in the technical field. X-ray conductors of this type have so far been used for local-resolution X-ray emission measurements. For the herein suggested use, these glass capillaries have the special advantage of being heat-resistant to several

hundred degrees Celsius and therefore can be moved very close to the substance to be measured, even if this substance has high temperatures.

Please replace paragraph [016] with the following amended paragraph:

Owing to the fact that soft X-rays with an energy below 2 keV are absorbed to a high degree by air, the hollow tubes/glass capillaries are preferably filled with hydrogen or helium, ~~as mentioned in claim 7,~~ wherein helium is preferred because it is easier to handle. As a result, relatively long distances between substance and detector can be overcome, e.g. 20 to 30 cm, even when measuring low photon energies.

Please replace paragraph [017] with the following amended paragraph:

~~One alternative to the device according to claim 7 is detailed in claim 8.~~
~~The~~ In an alternative embodiment, permanent filling of the glass capillary with a lightweight gas requires the glass capillary to be closed off even at the end facing the substance. Suitable windows as a rule consist of thin plastic or beryllium films with a low temperature and/or mechanical resistance and can therefore not be used for some applications. For those applications, we suggest leaving open the ends of the hollow tubes/glass capillaries and flushing them permanently with

helium during the operation, wherein the flushing can also prevent foreign particles from being deposited inside the glass capillaries.

Please replace paragraph [018] with the following amended paragraph:

~~According to claims 9 to 13, the~~ The X-ray conductors are preferably combined to form a bundle in a preferred embodiment, which has considerable advantages with respect to handling and adjustment as well as total sensitivity.

Please replace paragraph [019] with the following amended paragraph:

To permit an easier interpretation and reproduction of the measuring results, it is generally necessary, or at least helpful, to know the precise vertical position of the sample surface. The use of a distance sensor is therefore suggested. Laser distance sensors are particularly suitable for this, wherein such a laser distance sensor is preferably connected to a waveguide. ~~According to claim 18, this~~ This waveguide [[is]] may be connected to at least one of the existing X-ray conductors, so that the distance measurements are not time-displaced or location-displaced, relative to the X-ray measurement. As a result, the total accuracy of the measurement can be increased considerably.

Please replace paragraph [020] with the following amended paragraph:

AMENDMENT

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~~Claim 9 proposes that for~~ For the parallel alignment of the X-rays, an X-ray split lens may be arranged in the beam path from the X-ray source before the radiated light hits the substance to be measured, which results in two advantages. On the one hand, the intensity radiated onto the measuring range can be increased because the radiated light no longer decreases in intensity proportional $1/r^2$ following the parallel alignment. On the other hand, no fluctuations or only slight fluctuations occur in the irradiated intensity when the height of the sample surface changes, which cannot be avoided particularly with large-grain samples, thus permitting an easier interpretation of the measuring results.